UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/879,451	06/12/2001	Dimitrios Papadimitriou	50001.2060	3537

27045 7590 09/18/2006

ERICSSON INC.
6300 LEGACY DRIVE
M/S EVR C11
PLANO, TX 75024

EXAMINER	
DANIEL JR, WILLIE J	

ART UNIT	PAPER NUMBER
2617	

DATE MAILED: 09/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/879,451	PAPADIMITRIOU ET AL.	
	Examiner	Art Unit	
	Willie J. Daniel, Jr.	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 February 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *17-37* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *17-37* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to applicant's RCE amendment filed on 15 February 2006. **Claims 17-37** are now pending in the present application. This office action is made **Non-Final**.

Claim Objections

2. **Claims 25** and **30-37** are objected to because of the following informalities:

   a. Claim 25 recites the limitation "...selection..." in line(s) 9 of the claim. The Examiner interprets as --circuit pathway selection-- as recited in line(s) 7 of the claim.

   b. Claims 30-37 recites the limitation "...arrangement..." as in line(s) 1 of claim 30. The Examiner suggests replacing the limitation "...arrangement..." with for example --telecommunication network-- as stated in abstract and pg. 7, [0022]. The suggestion for claim 25 is example and the Examiner recommends that the applicant clarify the claim language as supported by the specification.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 17-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Ho et al.** (hereinafter Ho) (**US 6,091,953**) in view of **Naqvi et al.** (hereinafter Naqvi) (**US 6,850,763 B1**).

Regarding **claim 17**, Ho discloses a method for dynamic allocation of a circuit pathway between a requesting switch, the MSC (104, 1702) which reads on the claimed "requesting switch" being one of a pool of switches (104, 106, 108), and a BSC (110, 1708) which reads on the claimed "access node" via a dispatching switch (102; message router - 1716) which reads on the claimed "media gateway (MGW)" (see col. 5, lines 18-30Figs. 1, 17), comprising the steps of:

contacting a Node (1712) requesting a circuit connection (e.g., path or channel) to a target access node (110) (see col. 21, lines 7-18; col. 18, lines 36-41; Figs. 1, 14, 17), where the MSC can trigger an assignment procedure or request a channel by using a network element (1712) to connect. The scalability of the system can be increased by adding additional MSCs, dispatching switches (or message routers) for such reasons as load-balancing and capacity management (see col. 20, lines 28-37, 56-61), where multiple message routers (1718) and/or dispatching switches (102) are implemented in the system and

controlled or managed by a hierarchical system element such as element (1712) or softswitch.;

consulting a Database (e.g., table) to determine an available circuit pathway between the requesting switch (102) and the target access node (110), wherein the circuit pathway is identified in the MGWSDB by a Circuit Identity Code (CIC) (see col. 21, lines 7-18; col. 18, lines 36-41; col. 7, lines 39-65; col. 9, line 57 - col. 10, line 4; col. 10, lines 14-22; Figs. 2 and 5A), where the system is able to establish a connection between the MSC and BSC in which a database and CIC would be inherent because the system has an addressing table that defines the connections and routes used between the elements to allocate a pathway or channel assignment between the MSC (102) and BSC (110);

selecting one media gateway (1716) from among a plurality of media gateways (1716, 1718) (see col. 20, lines 1-6; col. 6, lines 1-10; Figs. 17 and 1), where the system has multiple message routers (1716, 1718) and/or dispatching switches (102) that are providing connections between the MSC (1702, 104) and BSC (1708, 110);

reserving the CIC associated with a selected circuit pathway at the one media gateway (102, 1716) (see col. 20, lines 1-6; col. 6, lines 1-10; Figs. 17 and 1), where the system has multiple message routers (1716, 1718) and/or dispatching switches (102) that are providing connections between the MSC (1702, 104) and BSC (1708, 110); and

sending the identity of the MGW and the CIC to the requesting switch (104) (see col. 20, lines 1-6; col. 6, lines 1-10; Figs. 17 and 1), where the system establishes a connection between the message router (1716) and/or dispatching switch (102) in which the MSC (104) would be aware of the identity of the MGW and CIC to provide signaling. Ho does not

specifically disclose having the features media gateway selection node (MGWSN); a media gateway selection database (MGWSDB). However, the examiner maintains that the features media gateway selection node (MGWSN); a media gateway selection database (MGWSDB) was well known in the art, as taught by Naqvi.

In the same field of endeavor, Naqvi discloses the features switch (300) which reads on the claimed media gateway selection node (MGWSN) (see col. 5, lines 10-17; Fig. 11), where the switch has media gateway controller (1110) for selecting media gateways; a media gateway selection database (MGWSDB) (see col. 5, lines 10-17; col. 14, lines 37-38; Fig. 11), where the switch (300) has a media gateway controller in which a media gateway selection database would be inherent for the switch (300) to select between media gateways of the data plane. Also, the switch manages circuits including circuit identification codes (CIC) between the BSC and the MSC (see col. 13, line 66 - col. 14, line 3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Ho and Naqvi to have the features media gateway selection node (MGWSN); a media gateway selection database (MGWSDB), in order to allow communication traffic to be siphoned to or from alternative network, as taught by Naqvi (see col. 3, lines 61-64).

Regarding **claim 18**, Ho as applied to claim 17 discloses the feature wherein the step of contacting a Node (1712) further comprises the Node (1712) being contacted by the requesting switch (104), the requesting switch (104) being one Mobile Switching Center (MSC) in a pool of MSCs (104, 106, 108) (see col. 21, lines 7-18; col. 18, lines 36-41; Figs. 1, 14, 17), where the MSC can trigger an assignment procedure or request a channel by using

a network element (1712) to connect. The scalability of the system can be increased by adding additional MSCs, dispatching switches (or message routers) for such reasons as load-balancing and capacity management (see col. 20, lines 28-37, 56-61), where multiple message routers (1718) and/or dispatching switches (102) are implemented in the system and controlled by a hierarchical system element such as element (1712). Ho does not specifically disclose having the features media gateway selection node (MGWSN). However, the examiner maintains that the features media gateway selection node (MGWSN) was well known in the art, as taught by Naqvi.

Naqvi further discloses the feature switch (300) which reads on the claimed media gateway selection node (MGWSN) (see col. 5, lines 10-17; Fig. 11), where the switch has media gateway controller (1110) for selecting media gateways.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Ho and Naqvi to have the features media gateway selection node (MGWSN), in order to allow communication traffic to be siphoned to or from alternative network, as taught by Naqvi (see col. 3, lines 61-64).

Regarding **claim 19**, Ho as applied to claim 18 discloses the feature wherein the Node (1712) is adapted to respond to a request for an available circuit pathway to an access node (110) (see col. 21, lines 7-18; col. 18, lines 36-41; Figs. 1, 14, 17), where the MSC can trigger an assignment procedure or request a channel by using a hierarchical system element such as element (1712) or softswitch,

by accessing the Database to identify the available circuit pathway between the one MSC (104) and a requested target access node (110), wherein the target access node (110) is a

particular Base Station Controller (BSC) in a group of BSCs (110, 112, 114, 116) (see col. 7, lines 39-65; col. 9, line 57 - col. 10, line 4; col. 10, lines 14-22; Figs. 2 and 5A), where the system is able to establish a connection between the MSC and BSC in which a database would be inherent because the system has an addressing table that defines the connections and routes used between the elements to allocate a pathway or channel assignment between the MSC (102) and BSC (110). Ho does not specifically disclose having the features MGWSN; MGWSDB. However, the examiner maintains that the features MGWSN; MGWSDB was well known in the art, as taught by Naqvi.

Naqvi further discloses the features switch (300) which reads on the claimed MGWSN (see col. 5, lines 10-17; Fig. 11), where the switch has media gateway controller (1110) for selecting media gateways; a MGWSDB (see col. 5, lines 10-17; col. 14, lines 37-38; Fig. 11), where the switch (300) has a media gateway controller in which a media gateway selection database would be inherent for the switch (300) to select between media gateways of the data plane.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Ho and Naqvi to have the features MGWSN; MGWSDB, in order to allow communication traffic to be siphoned to or from alternative network, as taught by Naqvi (see col. 3, lines 61-64).

Regarding **claim 20**, the combination of Ho and Naqvi discloses every limitation claimed, as applied above (see claim 19), in addition Ho further discloses the method of claim 19, wherein the one MSC (104) is seeking to connect to a mobile unit (136) which reads on the claimed "mobile terminal" that is connected with the particular BSC (110) (see

col. 10, lines 14-22; col. 21, lines 7-18; col. 18, lines 36-41; Figs. 1, 14, 17), where the MSC can trigger an assignment procedure or request a channel by using a hierarchical system element such as element (1712) or a softswitch.

Regarding **claim 21**, Ho as applied to claim 19 discloses the feature wherein the Node (1712) is a central means of circuit pathway control such that no dedicated circuits are required for the group of BSCs (110) to each MSC (104) in the MSC pool (see col. 20, lines 19-22, 45-55; Figs. 1 and 17). Ho does not specifically disclose having the feature MGWSN. However, the examiner maintains that the feature MGWSN was well known in the art, as taught by Naqvi.

Naqvi further discloses the feature switch (300) which reads on the claimed MGWSN (see col. 5, lines 10-17; Fig. 11), where the switch has media gateway controller (1110) for selecting media gateways.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Ho and Naqvi to have the feature MGWSN, in order to allow communication traffic to be siphoned to or from alternative network, as taught by Naqvi (see col. 3, lines 61-64).

Regarding **claim 22**, Ho as applied to claim 19 discloses the feature wherein the database DB comprises relationships between the circuit pathways, the circuit identity codes, the plurality of media gateways (102, 1716) and the group of BSCS (110, 112, 114, 116) (see col. 7, lines 39-65; col. 9, line 57 - col. 10, line 4; col. 10, lines 14-22; Figs. 2 and 5A), where the system is able to establish a connection between the MSC and BSC in which a database would be inherent because the system has an addressing table that defines the connections

and routes used between the elements to allocate a pathway or channel assignment between the MSC (102) and BSC (110). Ho does not specifically disclose having the feature MGWSDB. However, the examiner maintains that the feature MGWSDB was well known in the art, as taught by Naqvi.

Naqvi further discloses the feature a MGWSDB (see col. 5, lines 10-17; col. 14, lines 37-38; Fig. 11), where the switch (300) has a media gateway controller in which a media gateway selection database would be inherent for the switch (300) to select between media gateways of the data plane.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Ho and Naqvi to have the feature MGWSDB, in order to allow communication traffic to be siphoned to or from alternative network, as taught by Naqvi (see col. 3, lines 61-64).

Regarding **claim 23**, Ho as applied to claim 19 discloses the feature wherein the Node (1712) is connected between the pool of MSCs and media gateways (102, 1716), wherein the media gateways connect to the group of BSCs (110) (see Figs. 1 and 17). Ho does not specifically disclose having the feature MGWSN. However, the examiner maintains that the feature MGWSN was well known in the art, as taught by Naqvi.

Naqvi further discloses the feature switch (300) which reads on the claimed MGWSN (see col. 5, lines 10-17; Fig. 11), where the switch has media gateway controller (1110) for selecting media gateways.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Ho and Naqvi to have the feature

MGWSN, in order to allow communication traffic to be siphoned to or from alternative network, as taught by Naqvi (see col. 3, lines 61-64).

Regarding **claim 24**, Ho as applied to claim 19 discloses the feature responsive to terminating communications between the one MSC (104) and the particular BSC (110) (see Figs. 6, 7 "ref. 724", 8),

the MSC (104) informing the Node (1716, 102) that the call is released and the circuit pathway between the MSC (104), the media gateway (1716, 102) and the particular BSC (110) is released, whereupon the Node (1716, 102) updates the database DB regarding the circuit pathway (see Figs. 6, 7 "ref. 724", 8, 17 and 1). Ho does not specifically disclose having the features MGWSN; MGWSDB. However, the examiner maintains that the features MGWSN; MGWSDB was well known in the art, as taught by Naqvi.

Naqvi further discloses the features switch (300) which reads on the claimed MGWSN (see col. 5, lines 10-17; Fig. 11), where the switch has media gateway controller (1110) for selecting media gateways; a MGWSDB (see col. 5, lines 10-17; col. 14, lines 37-38; Fig. 11), where the switch (300) has a media gateway controller in which a media gateway selection database would be inherent for the switch (300) to select between media gateways of the data plane.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Ho and Naqvi to have the features MGWSN; MGWSDB, in order to allow communication traffic to be siphoned to or from alternative network, as taught by Naqvi (see col. 3, lines 61-64).

Regarding **claim 25**, Ho discloses a node (1712) in a telecommunications network for dynamic allocation of a circuit pathway between a requesting switch (104, 1702), and a target access node (110, 1708) via a media gateway (102, 1716), the node (1712) (see Figs. 1 and 17) comprising:

a node (N) (1712) for selecting a circuit pathway between the requesting switch (104) and the target access node (110, 1708), wherein the Node (N) (1712) (see col. 20, lines 1-6; col. 6, lines 1-10; Figs. 17 and 1), where the system has multiple message routers (1716, 1718) and/or dispatching switches (102) that are providing connections between the MSC (1702, 104) and BSC (1708, 110) in which the MSC can trigger an assignment procedure or request a channel by using a network element (1712) to connect (see col. 21, lines 7-18; col. 18, lines 36-41; Figs. 1, 14, 17). The scalability of the system can be increased by adding additional MSCs, dispatching switches (or message routers) for such reasons as load-balancing and capacity management (see col. 20, lines 28-37, 56-61), where multiple message routers (1716) and/or dispatching switches (102) are implemented in the system and controlled or managed by a hierarchical system element such as element (1712) or softswitch. , further comprises

means (1712) for notifying the requesting switch of the circuit pathway selection (see col. 20, lines 19-22, 45-55; col. 21, lines 7-18; col. 18, lines 36-41; Figs. 1, 14, and 17), where the MSC can trigger an assignment procedure or request a channel by using a network element (1712) to connect and

means (1712) for reserving the selection with a selected media gateway (102, 1716), wherein the circuit pathway (Figs. 1 and 17) includes

the requesting switch (104, 1702), the requesting switch (104, 1702) being one of a pool of switches (104, 106, 108) (see Figs. 1 and 17),

the target access node (110, 1708), the target access node (110, 1708) being one of a group of access nodes (110, 112, 114, 116) (see Figs. 1 and 17) and

the media gateway (102), being one of a plurality of media gateways (102, 1716, 1718) (see Figs. 1 and 17); and

a database (DB) (e.g., table), coupled with the N (1712), for storing circuit identity codes (ClC) associated with circuit pathways utilized by the N (1712) for reserving a selected circuit pathway (see col. 7, lines 39-65; col. 9, line 57 - col. 10, line 4; col. 10, lines 14-22; Figs. 1-2, 5A, and 17), where the system is able to establish a connection between the MSC and BSC in which a database and CIC would be inherent because the system has an addressing table that defines the connections and routes used between the elements to allocate a pathway or channel assignment between the MSC (102) and BSC (110). Ho does not specifically disclose having the features media gateway selection node (MGWSN); a media gateway selection database (MGWSDB). However, the examiner maintains that the features media gateway selection node (MGWSN); a media gateway selection database (MGWSDB) was well known in the art, as taught by Naqvi.

Naqvi further discloses the features switch (300) which reads on the claimed media gateway selection node (MGWSN) (see col. 5, lines 10-17; Fig. 11), where the switch has media gateway controller (1110) for selecting media gateways; a media gateway selection database (MGWSDB) (see col. 5, lines 10-17; col. 14, lines 37-38; Fig. 11), where the switch (300) has a media gateway controller in which a media gateway selection database would be

inherent for the switch (300) to select between media gateways of the data plane. Also, the switch manages circuits including circuit identification codes (CIC) between the BSC and the MSC (see col. 13, line 66 - col. 14, line 3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Ho and Naqvi to have the features media gateway selection node (MGWSN); a media gateway selection database (MGWSDB), in order to allow communication traffic to be siphoned to or from alternative network, as taught by Naqvi (see col. 3, lines 61-64).

Regarding **claim 26**, Ho as applied to claim 25 discloses the feature wherein the database (DB) (e.g., table) further comprises identities of the plurality of media gateways (102, 1716) and identities of the group of access nodes (110, 112, 114, 116) (see col. 7, lines 39-65; col. 9, line 57 - col. 10, line 4; col. 10, lines 14-22; Figs. 1, 2 , 5A and 17), where the system is able to establish a connection between the MSC and BSC in which a database would be inherent because the system has an addressing table that defines the connections and routes used between the elements to allocate a pathway or channel assignment between the MSC (102) and BSC (110). Ho does not specifically disclose having the feature MGWSDB. However, the examiner maintains that the feature MGWSDB was well known in the art, as taught by Naqvi.

Naqvi further discloses the feature a MGWSDB (see col. 5, lines 10-17; col. 14, lines 37-38; Fig. 11), where the switch (300) has a media gateway controller in which a media gateway selection database would be inherent for the switch (300) to select between media gateways of the data plane.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Ho and Naqvi to have the feature MGWSDB, in order to allow communication traffic to be siphoned to or from alternative network, as taught by Naqvi (see col. 3, lines 61-64).

Regarding **claim 27**, Ho as applied to claim 25 discloses the feature wherein the node N (1712) is a central control means between the requesting switch (104) and the target access node (110) such that no dedicated circuits from the access nodes (110, 112, 114, 116) to each switch (104, 106, 108) are required (see col. 20, lines 19-22, 45-55; Figs. 1 and 17). Ho does not specifically disclose having the feature MGWSN. However, the examiner maintains that the feature MGWSN was well known in the art, as taught by Naqvi.

Naqvi further discloses the feature switch (300) which reads on the claimed MGWSN (see col. 5, lines 10-17; Fig. 11), where the switch has media gateway controller (1110) for selecting media gateways.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Ho and Naqvi to have the feature MGWSN, in order to allow communication traffic to be siphoned to or from alternative network, as taught by Naqvi (see col. 3, lines 61-64).

Regarding **claim 28**, the combination of Ho and Naqvi discloses every limitation claimed, as applied above (see claim 25), in addition Ho further discloses the node of claim 25, wherein the pool of switches (104, 106, 108) is a pool of Mobile Switching Centers (MSCs), the requesting switch (104, 1702) being one MSC in a pool of MSCs (104, 106,

108) and the target access (110, 1708) node being a particular Base Station Controller (BSC) in a group of BSCs (110, 112, 114, 116) (see Figs. 1 and 17).

Regarding **claim 29**, Ho as applied to claim 28 discloses the feature wherein the node N (1712) is connected between the pool of MSCs (104, 106, 108) and the plurality of media gateways (102, 1716), wherein the plurality of media gateways (1716, 1718, 102) connect to the group of BSCs (110, 112, 114, 116) (see Figs. 1 and 17). Ho does not specifically disclose having the feature MGWSN. However, the examiner maintains that the feature MGWSN was well known in the art, as taught by Naqvi.

Naqvi further discloses the feature switch (300) which reads on the claimed MGWSN (see col. 5, lines 10-17; Fig. 11), where the switch has media gateway controller (1110) for selecting media gateways.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Ho and Naqvi to have the feature MGWSN, in order to allow communication traffic to be siphoned to or from alternative network, as taught by Naqvi (see col. 3, lines 61-64).

Regarding **claim 30**, Ho discloses an wireless communication system (100) which reads on the claimed "arrangement" for dynamic allocation of a circuit pathway between a requesting switch (104), and a target access node (110) via a media gateway (102) (see col. 5, lines 18-31; Figs. 1 and 17), the arrangement comprising:

a pool of switches (104, 106, 108), including the requesting switch (104, 1702) (see Figs. 1 and 17);

a group of access nodes (110, 112, 114, 116), including the target access node (110, 1708) (see Figs. 1 and 17);

a plurality of media gateways (102, 1716, 1718) situated between and connected to the group of access nodes (110, 112, 114, 116) (see Figs. 1 and 17);

a Node (N) (1712) for determining an available circuit pathway between the requesting switch (104, 1702) and the target access node (110, 1708) (see col. 7, lines 39-65; col. 9, line 57 - col. 10, line 4; col. 10, lines 14-22; col. 20, lines 1-6; col. 6, lines 1-10; Figs. 1-2, 17, and 5A), where the system has multiple message routers (1716, 1718) and/or dispatching switches (102) that are providing connections between the MSC (1702, 104) and BSC (1708, 110) in which the MSC can trigger an assignment procedure or request a channel by using a network element (1712) to connect (see col. 21, lines 7-18; col. 18, lines 36-41; Figs. 1, 14, 17). The scalability of the system can be increased by adding additional MSCs, dispatching switches (or message routers) for such reasons as load-balancing and capacity management (see col. 20, lines 28-37, 56-61), where multiple message routers (1716) and/or dispatching switches (102) are implemented in the system and controlled or managed by a hierarchical system element such as element (1712) or softswitch.,

wherein the circuit pathway is identified in a Database (DB) by a Circuit Identity Code (CIC) (see col. 7, lines 39-65; col. 9, line 57 - col. 10, line 4; col. 10, lines 14-22; Figs. 2 and 5A), where the system is able to establish a connection between the MSC and BSC in which a database and CIC would be inherent because the system has an addressing table that defines the connections and routes used between the elements to allocate a pathway or channel assignment between the MSC (102) and BSC (110),

wherein the node (N) (1712) has

means (1712) for accessing the database DB for selecting the media gateway (MGW) (102, 1716) from the plurality of MGWs (102, 1716, 1718) (see col. 21, lines 7-18; col. 18, lines 36-41; col. 7, lines 39-65; col. 9, line 57 - col. 10, line 4; col. 10, lines 14-22; Figs. 2 and 5A), where the system is able to establish a connection between the MSC and BSC in which a database and CIC would be inherent because the system has an addressing table that defines the connections and routes used between the elements to allocate a pathway or channel assignment between the MSC (102) and BSC (110);;

means (1712) for receiving the CIC associated with the selected circuit pathway (see col. 20, lines 1-6; col. 6, lines 1-10; Figs. 17 and 1), where the system establishes a connection between the message router (1716) and/or dispatching switch (102) in which the MSC (104) would be aware of the identity of the MGW and CIC to provide signaling; and

means (1712) for sending the identity of the MGW (102) and the CIC to the requesting switch (104) (see col. 20, lines 1-6; col. 6, lines 1-10; Figs. 17 and 1), where the system establishes a connection between the message router (1716) and/or dispatching switch (102) in which the MSC (104) would be aware of the identity of the MGW and CIC to provide signaling. Ho does not specifically disclose having the features media gateway selection node (MGWSN); a media gateway selection database (MGWSDB). However, the examiner maintains that the features media gateway selection node (MGWSN); a media gateway selection database (MGWSDB) was well known in the art, as taught by Naqvi.

Naqvi further discloses the features switch (300) which reads on the claimed media gateway selection node (MGWSN) (see col. 5, lines 10-17; Fig. 11), where the switch has

media gateway controller (1110) for selecting media gateways; a media gateway selection database (MGWSDB) (see col. 5, lines 10-17; col. 14, lines 37-38; Fig. 11), where the switch (300) has a media gateway controller in which a media gateway selection database would be inherent for the switch (300) to select between media gateways of the data plane. Also, the switch manages circuits including circuit identification codes (CIC) between the BSC and the MSC (see col. 13, line 66 - col. 14, line 3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Ho and Naqvi to have the features media gateway selection node (MGWSN); a media gateway selection database (MGWSDB), in order to allow communication traffic to be siphoned to or from alternative network, as taught by Naqvi (see col. 3, lines 61-64).

Regarding **claim 31**, the combination of Ho and Naqvi discloses every limitation claimed, as applied above (see claim 30), in addition Ho further discloses the arrangement (100) of claim 31, wherein the requesting switch (104, 1702) is a requesting mobile switching center (MSCs), the pool of switches (104, 106, 108) is a pool of MSCs (104, 106, 108), the target access node (110, 1708) is a target Base Station Controller (BSC) and the group access nodes is a group of BSCs (110, 112, 114, 116) (see Figs. 1 and 17).

Regarding **claim 32**, Ho as applied to claim 30 discloses the feature wherein the node N (1712) is adapted to respond to a request for an available circuit pathway to the target BSC (110) by accessing the database DB to select an available circuit pathway between the requesting MSC (104) and the target BSC (110) (see col. 7, lines 39-65; col. 9, line 57 - col. 10, line 4; col. 10, lines 14-22; Figs. 2 and 5A), where the system is able to establish a

connection between the MSC and BSC in which a database would be inherent because the system has an addressing table that defines the connections and routes used between the elements to allocate a pathway or channel assignment between the MSC (102) and BSC (110). Ho does not specifically disclose having the features media gateway selection node (MGWSN); a media gateway selection database (MGWSDB). However, the examiner maintains that the features media gateway selection node (MGWSN); a media gateway selection database (MGWSDB) was well known in the art, as taught by Naqvi.

Naqvi further discloses the features switch (300) which reads on the claimed media gateway selection node (MGWSN) (see col. 5, lines 10-17; Fig. 11), where the switch has media gateway controller (1110) for selecting media gateways; a media gateway selection database (MGWSDB) (see col. 5, lines 10-17; col. 14, lines 37-38; Fig. 11), where the switch (300) has a media gateway controller in which a media gateway selection database would be inherent for the switch (300) to select between media gateways of the data plane. Also, the switch manages circuits including circuit identification codes (CIC) between the BSC and the MSC (see col. 13, line 66 - col. 14, line 3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Ho and Naqvi to have the features media gateway selection node (MGWSN); a media gateway selection database (MGWSDB), in order to allow communication traffic to be siphoned to or from alternative network, as taught by Naqvi (see col. 3, lines 61-64).

Regarding **claim 33**, the combination of Ho and Naqvi discloses every limitation claimed, as applied above (see claim 32), in addition Ho further discloses the method of

claim 32, wherein the requesting MSC (104) is seeking to connect to a mobile unit (136) which reads on the claimed "mobile terminal" that is coupled with the target BSC (110) (see col. 10, lines 14-22; col. 21, lines 7-18; col. 18, lines 36-41; Figs. 1, 14, 17), where the MSC can trigger an assignment procedure or request a channel by using a hierarchical system element such as element (1712) or a softswitch.

Regarding **claim 34**, Ho as applied to claim 31 discloses the feature wherein the Node (1712) is a central means of control such that no dedicated circuits are required for the group of BSCs (110) to each MSC (104) (see col. 20, lines 19-22, 45-55; Figs. 1 and 17). Ho does not specifically disclose having the feature MGWSN. However, the examiner maintains that the feature MGWSN was well known in the art, as taught by Naqvi.

Naqvi further discloses the feature switch (300) which reads on the claimed MGWSN (see col. 5, lines 10-17; Fig. 11), where the switch has media gateway controller (1110) for selecting media gateways.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Ho and Naqvi to have the feature MGWSN, in order to allow communication traffic to be siphoned to or from alternative network, as taught by Naqvi (see col. 3, lines 61-64).

Regarding **claim 35**, Ho as applied to claim 32 discloses the feature wherein the database DB comprises relationships between the circuit pathways, associated circuit identity codes, media gateways (102, 1716) and the group of BSCS (110, 112, 114, 116) (see col. 7, lines 39-65; col. 9, line 57 - col. 10, line 4; col. 10, lines 14-22; Figs. 2 and 5A), where the system is able to establish a connection between the MSC and BSC in which a database

would be inherent because the system has an addressing table that defines the connections and routes used between the elements to allocate a pathway or channel assignment between the MSC (102) and BSC (110). Ho does not specifically disclose having the feature MGWSDB. However, the examiner maintains that the feature MGWSDB was well known in the art, as taught by Naqvi.

Naqvi further discloses the feature a MGWSDB (see col. 5, lines 10-17; col. 14, lines 37-38; Fig. 11), where the switch (300) has a media gateway controller in which a media gateway selection database would be inherent for the switch (300) to select between media gateways of the data plane.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Ho and Naqvi to have the feature MGWSDB, in order to allow communication traffic to be siphoned to or from alternative network, as taught by Naqvi (see col. 3, lines 61-64).

Regarding **claim 36**, Ho as applied to claim 32 discloses the feature wherein the Node (N) (1712) is connected between the pool of MSCs (104, 106, 108) and media gateways (102, 1716), wherein the media gateways (102) further connect to the group of BSCs (110) (see Figs. 1 and 17). Ho does not specifically disclose having the feature MGWSN. However, the examiner maintains that the feature MGWSN was well known in the art, as taught by Naqvi.

Naqvi further discloses the feature switch (300) which reads on the claimed MGWSN (see col. 5, lines 10-17; Fig. 11), where the switch has media gateway controller (1110) for selecting media gateways.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Ho and Naqvi to have the feature MGWSN, in order to allow communication traffic to be siphoned to or from alternative network, as taught by Naqvi (see col. 3, lines 61-64).

Regarding **claim 37**, Ho as applied to claim 32 discloses the feature means for informing the Node (1716, 102) that the connection between the MSC (104) and the target BSC (110) is terminated, whereupon the circuit pathway between the MSC (104), the media gateway (1716, 102) and the target BSC (110) is released and the Node (1716, 102) updates the database DB regarding the status of the circuit pathway (see Figs. 6, 7 "ref. 724", 8, 17 and 1). Ho does not specifically disclose having the features MGWSN; MGWSDB. However, the examiner maintains that the features MGWSN; MGWSDB was well known in the art, as taught by Naqvi.

Naqvi further discloses the features switch (300) which reads on the claimed MGWSN (see col. 5, lines 10-17; Fig. 11), where the switch has media gateway controller (1110) for selecting media gateways; a MGWSDB (see col. 5, lines 10-17; col. 14, lines 37-38; Fig. 11), where the switch (300) has a media gateway controller in which a media gateway selection database would be inherent for the switch (300) to select between media gateways of the data plane.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Ho and Naqvi to have the features MGWSN; MGWSDB, in order to allow communication traffic to be siphoned to or from alternative network, as taught by Naqvi (see col. 3, lines 61-64).

Response to Arguments

4. Applicant's arguments filed 15 February 2006 have been fully considered but they are not persuasive.

The Examiner respectfully disagrees with applicant's arguments as the applied reference(s) provide more than adequate support and to further clarify (see the above claims and comments in this section).

5. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Gentry et al. (US 6,799,210 B1) discloses "Dynamic Association of Endpoints to Media Gateway Controllers".

b. Kriaras et al. (US 2002/0015394 A1) discloses "Telephone Systems".

c. Sundquist et al. (US 2004/0203785) discloses "Transmission of Voice Over IP in Wireless Telecommunications System".

d. Grabelsky et al. (US 6,766,377 B1) discloses "Media Gateway Proxy".

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Willie J. Daniel, Jr. whose telephone number is (571) 272-7907. The examiner can normally be reached on 8:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D. Banks-Harold can be reached on (571) 272-7905 or Nick Corsaro can be reached on (571) 272-7876. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/WJD,JR/

WJD,JR
12 September 2006

ERIKA A. GARY
PRIMARY EXAMINER